Record #	ABU	Unit	I/R	Item Nbr	Additional Consideration (Recommendation)	ABU Proposal	Resolution	Verifier Comments	Verifier Name	Verified On	Due Date	RR SOE	Assigned To	Status
12470	B&S	Transfer & Blending	1st Revalid ation	9.28	9.28 The concern is for tanks with internal foam piping systems. If hose leaks, the hose can fill with tank product. In the event of a fire, if system is used, hydrocarbon can be added to the fire instead of foam.  Plant Protection practice, since the purchase of Truck #1, is not to use these systems on tanks less than 200 feet in diameter. T-3100 is 242 feet in diameter.  Among the suggestions discussed by the team to address this concern are:  1) Consider on-line testing of the internal hose.  2) Alternatively, consider reevaluating the pros and cons the existing, but disconnected, external foam system (consider repairing and maintaining the external system if it is preferable).	Don Edlinger will investigate options with Brian Blomquist	Richmond Fire Department and Chevron Fire Department Memorandum dated June 27, 1997 states the agreement to use fire department personnel and mobile equipment to provide protection for floating roof tanks with less than 250 ft. diameter.  Tanks greater than 250:3104; 3105; 3106; 3107 @242:3100; 3101; 3102; 3103 All smaller tanks with these systems will be identified to isolate them and remove them during tank turn arounds.  The large tanks will be maintained with a PM program which is under development with Plant Protection, DED, & ERTC tank Best Practices.  This PM procedure and checklist is in draft form and will be developed of finalized as we test each tank due to different systems and sizes. When complete it will be posted in the EOM.	Will follow the test of each tank to finalize the procedure / checklist and have posted in the EOM.	Edlinger, Donald L	6/10/2004		3 S	Edlinger, Donald L.	Completed
12471	B&S	Transfer & Blending	1st Revalid ation	9.13	9.13 The concern is the currently sunken swing line in T-3100. The common drop/fill line is being used for suction to #4 Crude Unit. Operators are alert to water content in this tank, and the tank roof allows water into the tank whenever rain water accumulates.  The suggestion discussed by the team to address this concern is to consider fixing the swing line the next time the tank comes out of service. The current refinery oultlook suggest that swing lines be replaced with fixed suction nozzles for feed tanks.	T-3100 swing line is currently sunken. It is Locked, Blocked, and Tagged to prevent use. B&S does plan on replacing it during the next scheduled turnaround for this tank with a fixed suction nozzle. Which is scheduled for 2012. Accepted	T-3100 swing line is currently sunken. It is Locked, Blocked, and Tagged to prevent use. B&S does plan on replacing it during the next scheduled turnaround for this tank with a fixed suction nozzle. Which is scheduled for 2012. Ray Martinez has made a notation in the file for T-3100 Steve Urban has included it in the tank inspection report.	No concerns from Inspection as long as the affected swing line is secured with the proper LOTO proceedures. Will document this in Inspection's File maker data base as well as in Meridium data base as a history brief.	Urban, Steven L.	2/23/2004		3 S	Miller, Marshall G.	Completed

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12473	B&S	Transfer & Blending	1st Revalid ation	17.28	17.28 The concern is that external foam lines may be regularly inspected, which may increase the likelihood of a seal fire progessing to a fully engaged tank fire.  The suggestion discussed by the team to address this concern is to consider regular visual inspection of the foam system.  (Note: in the past, visual inspections have identified animal nests or corrosion products which could reduce foam flow rates. Visual may be preferential to water testing as lines are not designed to drain and water testing can cause corrosion)	Don Edlinger will investigate options, tank size and PM program. Richmond Fire Department and Chevron Fire Department Memorandum dated June 27, 1997 states the agreement to use fire department personnel and mobile equipment to provide protection for floating roof tanks with less than 250 ft. dlameter. Tanks greater than 250 ft. dlameter. Tanks greater than 250: 3104; 3105; 3106; 3107 @242: 3100; 3101; 3102; 3103 All smaller tanks with these systems will be identified to isolate them and remove the connections. Do not want someone to think they could use them in an emergency. The large tanks will be maintained with a PM program which is under development with Plant Protection, DED, & ERTC tank Best Practices.	Richmond Fire Department and Chevron Fire Department Memorandum dated June 27, 1997 states the agreement to use fire department personnel and mobile equipment to provide protection for floating roof tanks with less than 250 ft. diameter. Tanks greater than 250: 3104; 3105; 3106; 3107 @242: 3100; 3101; 3102; 3103 All smaller tanks with these systems will be identified to isolate them and remove them during tank turn arounds. The large tanks will be maintained with a PM program which is under development with Plant Protection, DED, & ERTC tank Best Practices. This PM procedure and checklist is in draft form and will be developed of finalized as we test each tank due to different systems and sizes. When complete it will be posted in the EOM.	to finalize the procedure / checklist and have posted in the EOM.	Edlinger, Donald L	6/10/2004		4 5	Edlinger, Donald L.	Completed

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Record #	ABU	Unit	I/R	Item Nbr	Additional Consideration (Recommendation)	ABU Proposal	Resolution	Verifier Comments	Verifier Name	Verified On	Due Date	RR SOE	Assigned To	Status
12475	B&S	•	1st Revalid ation		44.01 Concern is the integrity of the storm water piping between the primary containment (tank berm) and secondary containment (impound basin - Lake Mead).  If the storm water line leaks, in the event of tank overflow, there is the possibility of gasoline to the hillside. In the event of a fully engaged tank fire, fire-fighting access could be compromised.  Among the suggestions discussed by the team to address this concern are:  1) Consder long term plan which may include adding storm-water drains to line inspection program.  2) Discuss with utilities division whether they have an inspection program for the storm water lines.	Don Edlinger will investigate options with Andy Hegedus This duplicates 127 127.07 which is the same issue U&E does not have a storm water drain line inspection program. They have discussed this issue and decided not to develop an inspection program at this time. These lines do not fit the requirements for API Standard 570 which does not have any inspection requirements for utility lines. However, when someone does notice a faulty storm water drain and / or an erosion area that could compromise any pipe support, they should report it and write a PassPort order to correct it. Declined					5/31/2004	4 E	Edlinger, Donald L.	Declined
12476	B&S	· ·	1st Revalid ation		44.24 the concern is that the waterdraw on sour water tank T-297 could be inadvertently left open, and gravity feed sour water to lower elevation tanks.  Among the suggestions discussed by the team to address this concern are:  1) Consider field verification that check valves are installed on other tanks connected to this waterdraw line.  2) May also consider operator refresher training on waterdraw operation.  3) Alternatively, consider blinding the waterdraw line or installing double block and bleed. This may be a fresh air job every time to switch blinds, which may offset the benefits of segregation.	This A/C is declined because we do not draw water off sour water tanks.  Can not add check valves to other tank on this line since it is required at times to draw their water off.  Water draw operation is already covered in Refresher training.  We do gravitate or pump the sour water tanks between each other, thus we do not want to blind off these lines.  Discussions with some operators & Head operators showed an agreement that this is not required.  Declined						3 S	Edlinger, Donald L.	Declined

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Record #	ABU	Unit	I/R	Item Nbr	Additional Consideration (Recommendation)	ABU Proposal	Resolution	Verifier Comments	Verifier Name	Verified On	Due Date	RR SOE	Assigned To	Status
12477	B&S	Transfer & Blending	1st Revalid ation	45.32	45.32 The concern is for tanks with concaternary foam piping systems (internal foam hose). If hose leaks, the piping can fill with tank product. In the event of a fire, if system is used, hydrocarbon can be added to the fire instead of foam.  Plant Protection practice, since the purchase of Truck #1, is not to use these systems on tanks less than 200 feet in diameter.  Foam piping system is not being maintained and is falling into disrepair.  Among the suggestion discussed by the team to address this concern are to consider:  1) Blinding the foam system, or else  2) Maintain, inspect and test it.	Tanks greater than 250: 3104; 3105; 3106; 3107 @242: 3100; 3101; 3102; 3103 All smaller tanks with these systems will be identified to isolate them and remove the connections. Do not want someone to think they could use them in an emergency. The large tanks will be maintained with a PM program which is under development with Plant	Richmond Fire Department and Chevron Fire Department Memorandum dated June 27, 1997 states the agreement to use fire department personnel and mobile equipment to provide protection for floating roof tanks with less than 250 ft. diameter. Tanks greater than 250: 3104; 3105; 3106; 3107 @242: 3100; 3101; 3102; 3103 All smaller tanks with these systems will be identified to isolate them and remove them during tank turn arounds.  The large tanks will be maintained with a PM program which is under development with Plant Protection, DED, & ERTC tank Best Practices. This PM procedure and checklist is in draft form and will be developed of finalized as we test each tank due to different systems and sizes. When complete it will be posted in the EOM.	to finalize the procedure / checklist and have posted in the EOM.	Edlinger, Donald L	6/10/2004		4 S	Edlinger, Donald L.	Completed

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12478	B&S	Transfer & Blending	1st Revalid ation	127.07	to land erosion caused by faulty storm water drainage.  Among the suggestions discussed by the team to address this concern are:  1) Consider long term plan which may include adding storm-water drains to line inspection program, or  2) Discuss with utilities division whether thay have an inspection	Don Edlinger will investigate options with Andy Hegedus This duplicates 44 4.0.1 which is the same issue.  U&E does not have a storm water drain line inspection program. They have discussed this issue and decided not to develop an inspection program at this time. These lines do not fit the requirements for API Standard 570 which does not have any inspection requirements for utility lines However, when someone does notice a faulty storm water drain and / or an erosion area that could compromise any pipe support, they should report it and write a PassPort order to correct it. Declined	Declined per resolution above	Declined per resolution above	Coyle, Michael E.	10/20/2003		5 S	Edlinger, Donald L.	Completed
12479	B&S	Transfer & Blending	1st Revalid ation	216.11	of glycerin.  The suggestion discussed by the team to address this concern is to consider verifying that the glycerin layer is checked (and replenished	Don Edlinger will discuss with Ethyl Corp. Al Corn (804) 788-5010 to requirements and explore options.  Have discussed this with Ethyl Corp. The glycerin should be there. However, the minimum level of Lead does prevent oxygen contacting the prophorics sludge. We are trying to find a way to verify the glycerin level, how to replace it and when. There is not a safe way to check the glycerin. The minimum lead level is adequate protection. Declined.						5 S	Edlinger, Donald L.	Declined
12480	B&S	Transfer & Blending	1st Revalid ation	216.01	rupture.  The suggestion discussed by the	Ron Post will investigate options and requirements for PSV protection. Don Edlinger will discuss with Ethyl Corp. Al Corn (804) 788-5010. Ethyl Corp. will not allow us to install a PRV on a lead drum. It is not plausible to design a system that will work. Can not build one large enough. Declined from Ethyl Corp. recommendations.	Ethyl Corp. will not allow us to install a PRV on a lead drum. It is not plausible to design a system that will work. Can not build one large enough. Declined from Ethyl Corp. recommendations.	Declined	Edlinger, Donald L.	10/31/2003		3 S	Edlinger, Donald L.	Declined

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Record #	ABU	Unit	I/R	Item Nbr	Additional Consideration (Recommendation)	ABU Proposal	Resolution	Verifier Comments	Verifier Name	Verified On	Due Date	RR SOE	Assigned To	Status
12481	B&S	Transfer & Blending	1st Revalid ation	pur not fire The tea	•	Ron Post will investigate options and requirements for spare sump pump.  This deluge system trips from fire, loss of electrical power and loss of air. It also alarms in the control house. Which would have someone investigate. If it was from loss of air the water can be turned off to prevent over filling the sump. This already is in the "Loss of yard air" emergancy procedure. Declined due to this information.						4 S	Edlinger, Donald L.	Declined

Record #	ABU	Unit	I/R	Item Nbr	Additional Consideration (Recommendation)	ABU Proposal	Resolution	Verifier Comments	Verifier Name	Verified On	Due Date	RR SOE	Assigned To	Status
12482	B&S	Transfer & Blending	1st Revalid ation	219.11	219.11 The concern is that during look box inspection the employee must place his/her head very close to the hole to allow a through inspection. This could lead to employee exposure to H2S or Benzene, with potential employee injury.  Among the suggestions discussed by the team to address this concern are to consider:  1) Making opening the look box a confined entry procedure, and/or 2) Installing an inspection system which safely allows employee to inspect look box and/or 3) Change the procedure to allow oil to be checked at the sample system.	Don Edlinger will investigate options.  Benzene is not an issue with looking in the look box. Benzene is removed by the carbon filters prior to the look box. Benzene is removed by the carbon filters prior to the look box. Hos look box. Hos look box. This level rapidly reduced the farther away we tested from the port. If someone does open the port and smell any H2S they should immediately close the port and use a respirator or Scott Air pack to inspect the box.  20 PPM OSHA CEILING  50 PPM OSHA EDAK 10 MINUTE(S) (ONCE IF NO OTHER MEASURABLE EXPOSURE OCCURS)  10 PPM (12 MG/M3) OSHA TWA (VACATED BY 58 FR 35338, JUNE 30, 1993)  15 PPM (21 MG/M3) OSHA STEL (VACATED BY 58 FR 35338, JUNE 30, 1993)  10 PPM ACGIH TWA  15 PPM ACGIH STEL  10 PPM (15 MG/M3) NIOSH RECOMMENDED CEILING 10 MINUTE(S)  Albert is completing the EWO modifications soon which we expect to eliminate the odor issues. Declined based on above information.						4 S	Edlinger, Donald L.	Declined

Record #	ABU	Unit	I/R	Item Nbr	Additional Consideration (Recommendation)	ABU Proposal	Resolution	Verifier Comments	Verifier Name	Verified On	Due Date	RR SOE	Assigned To	Status
12483	B&S	Transfer & Blending	1st Revalid ation		363.12 The concern is that P-10 & P-11 walkways and walkway at PRV header do not have alternate egress. This could lead to employee injury in the event of a fire.  The suggestion discussed by the team to address this concern is to, consider adding alternate exits from these walkways. 9/11/2002 we don't have to have two efresses as safeguard, Steve Scheye to discuss with safety.	Ron Post to investigate requirements and options for egress.	EWO #B04-004 issued by Albert Carrillo. Walkways being installed week of June 7, 2004. Will follow up on correcting any PSSR punch items.	Everything looks great except clean up of the area. Spare bracket, wood wedges, welding rod, & drink bottles.	Kinkela, Donald F.	7/30/2004		5 S	Post, Ronald W.	Completed
12484	B&S	Transfer & Blending	1st Revalid ation		362.07 the concern is the practice at the wharf of blocking valves in against an operating pump when a trandfer is complete. Notification to 24 PS is sometimes after the wharf valve has been closed. This is of special concern with the large pump P-1, which does not have low flow or high pressure automatic shutdown. There is a fifteen minute notification that the wharf gives to #24 PS operator which is not always properly used.  The suggestion discussed by the team to address this concern is to consider high pressure shutdown on the pump or other engineered safeguards against deadheading.	Ron Post will investigate options for shut down devices Checking pump curve and discussing with IMI Reviewing S/d options: amps, flow, pressure, new equipment or can control computers do this?	As of 6/10/04 Russ Cruzen has ordered the parts to install low amp S/Ds in the electrical breakers. They will be installed the week of 6/24/04. MOC has been started #13328. Job Completed	Verified S/D installed and witnessed it working on 11/3/04	Edlinger, Donald L.	11/5/2004		3 S	Edlinger, Donald L.	Completed

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12485	B&S	ŭ	1st Revalid ation		368.02 The concern is mismanifolding at #8 PS of the #4 CU, FCC or TKN feed lines, which can result in water or the wrong stock in the line leading to a possible plant shutdown.	Don Edlinger to investigate. Mismanifolding and water drawing and the consequences of these is already covered in initial and refresher training. Declined						3	0	Edlinger, Donald L.	Declined
					Among the suggestions discussed by the team to address this concern are to consider:										
					Improve line labeling, including operator training on the line labeling ("bumper sticker") machine.										
					2) Improved operator training and procedures highlighting the consequences of water in these process feed lines, or										
					3) Other methods of reducing the likelihood of mismanifolding.										
12486	B&S	Transfer & Blending	1st Revalid ation		380.10 The concern is that lack of containment on vacuum truck unloading spot, at #15 Pump Station. This could lead to leak to grade, soil contamination, and potential fire.  The suggestion discussed by the team to address this concern is to consider installing asphalt at vacuum truck unloading area to prevent ground contamination and to divert flow to #15 PS or process sewer.	Don Edlinger to investigate requirements and options for containment.  Ron Post will address options if needed.  Vacuum trucks are used in many areas of the refinery. They typically do use containment buckets, drums or pools when there is a possibility of leakage. This area does get used regularly, yet does not show any leakage has occurred here. If any leak does occur in the future we have emergency response and reporting procedures in place that would manage the situation.						4	E	Edlinger, Donald L.	Declined

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12487	B&S	Transfer & Blending	1st Revalid ation		365.01 The concern is that the crude sampling station on the 30" crude line is out of service, and parts of the system have been used elsewhere.  Among the suggestions discussed by the team to address this concern are:  1) Consider long term plan for dismantling 2) Blinding with signage and operator training, or 3) restoring to operations.	Al Standford will write work order to dismantle or isolate properly.	Sample station is disconnected, out of service, with no plans to use in the future. If we ever do decide to use it again we will do an MOC and review this A/C. Completed	Audit shows sample station disconnected and O/S Complete	Edlinger, Donald L.	11/6/2003		5 S	Standford, Alvin J.	Completed
					Possibly using the system on 36" crude line as a model.									
16068	B&S	Transfer & Blending	1st Revalid ation		Concern is P&ID No. D-238235 shows no check valve installed on steam-out line to outlet piping of V-201. Consider installing a check valve per RI-503 and updating the P&ID.		Check valve installed during 2000 S/D & P&ID updated. MEM 4/10/01		Moore, Ronald A.		5/31/2004	5 S	Moorhead, Margaret E.	Completed

Totals: 17 Records